

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Gronvald et al

Application No.: To be assigned

Group Art Unit: To be assigned

Filed: September 9, 2003

Examiner: To be assigned

For: Meiosis Regulating Compounds

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. 1.56, 1.97 and 1.98, Applicants submit herewith references which they believe may be material to the patentability of this application and with respect to which there may be a duty to disclose in accordance with 37 C.F.R. 1.56.

While the references may be "material" under 37 C.F.R. 1.56, it is not intended to constitute an admission that the references are "prior art" unless specifically designated as such.

The filing of this Information Disclosure Statement shall not be construed as a representation that no other material references than those listed exist or that a search has been conducted.

The references are listed in Form PTO-1449 which is in accordance with the requirements of M.P.E.P. 609. Copies of references were either cited by the USPTO or filed with USSN 09/878,884 filed June 11, 2001, 08/973,661 filed December 19, 1997, and 09/436,810 filed November 9, 1999, the benefit of which is claimed under 35 USC 120.

The references are as follows:

1. Parish, et al., STEROIDS, Vol. 48, pp. 407-418 (1986)
2. Anastasia, et al., J. Chem. Soc., Vol. 1, pp. 587-590, (1983)
3. Parish, et al., STEROIDS, pp. 579-596, (1989)
4. Patterson, et al., J. Org. Chem., Vol. 44, No. 11, pp. 1866-1871 (1979)
5. Frelek et al., Tetrahed, Vol. 2, No. 5, pp. 381-387 (1991)
6. WO 96/00235
7. US 5,364,847


8. HU 200 203
9. HU 214 873
10. Bird et al., J. Chem. Soc., pp. 4728-4755 (1979)
11. Kim et al., Bioorg. Med. Chem., Vol., 3 No. 4, pp. 367-374 (1995)
12. Dolle et al., J. Chem. Soc. Chem. Comm., Vol. 19, pp. 133-135 (1988)
13. Byskov et al., The Physiology of Reproduction, 2nd Ed., Ch. 9, pp. 487-540 (1994)
14. Grant et al., Aust. J. Chem., Vol. 38, pp. 1505-1519 (1985)
15. Boar et al., J. Chem. Soc., Vol. 1, pp. 1237-1241 (1975)
16. Barton et al., J. Chem. Soc., Vol. 1, pp. 251-259 (1987)
17. Arunachalam et al., The Journal of Org. Chem., Vol. 46, pp. 2966-2968 (Feb. 20, 1981)
18. Dolle et al., The Journal of Organic Chem., Vol. 51, pp. 4047-4053 (1986)
19. Fieser et al., J. AM. Chem. Soc., Vol. 75, pp. 4719-4722 (1953)
20. Fieser, J. AM. Chem. Soc., Vol. 75, pp. 4395-4423 (1953)
21. Byskov et al., Nature, Vol. 374, pp. 559-562 (Apr. 6, 1995)
22. Byskov et al., Dev. Biol., Vol. 52, pp. 193-200 (1976)
23. Downs, Mol. Reprod. Dev., Vol. 35, pp. 82-94 (1993)
24. Eppig et al., Dev. Biol., Vol. 119, pp. 313-321 (1987)
25. Downs, Dev. Biol., Vol. 82, pp. 454-458 (Jan. 1985)  
Christian Grøndahl et al., Hum Reprod, Vol. 15, Part 5, pp. 3-10 (2000)
26. Christa Hegele-Hartung et al., Biol Reprod, Vol. 64, pp. 418-424 (2001)
27. Christa Hegele-Hartung et al., Biol Reprod, Vol. 61, pp. 1362-1372 (1999)
28. Grøndahl et al., Bio Reprod, Vol. 58 (5) pp. 1297-1302 (1998)
29. US 5,716,777
30. Dave et al., Can. J. Chem, vo. 58(23), pages 2666-2678, (1980)
31. Suginome et al., J. Chem Soc., Perkin Trans. 1, (12) pages 2920-2925, (1979)

It is respectfully requested that these references be considered by the Patent and Trademark Office in its examination of the above-identified application and be made of record therein. The Examiner is also invited to contact the Undersigned if there are any questions concerning this paper or the attached references.

The information disclosure statement submitted herewith is being filed on filing date of application. Therefore, no fee is due.

Respectfully submitted,

Date: September 9, 2003

  
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PATENT TRADEMARK OFFICE

FORM PTO-1449  
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Atty. Docket No. 4475.534-U.S.

Serial No. T be assigned

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Applicant Gr nvald et al.

(Use several sheets if necessary)

Filing Date September 9, 2003

Group To be assigned

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	US 5,364,847	11/15/94	Labrie et al.			
	US 5,716,777	02/1998	Byskov et al.			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 96/00235	1/4/96	WIPO				
	HU 200 203	6/18/86	Hungary				
	HU 214 873	1/22/91	Hungary				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Parish. et al.. STEROIDS. Vol. 48. pp. 407-418 (1986)
	Anastasia. et al.. J. Chem. Soc.. Vol. 1. pp. 587-590. (1983)
	Parish. et al.. STEROIDS. pp. 579-596. (1989)
	Patterson. et al.. J. Org. Chem.. Vol. 44. No. 11. pp. 1866-1871 (1979)
	Frelek et al.. Tetrahed. Vol. 2. No. 5. pp. 381-387 (1991)
	Bird et al.. J. Chem. Soc.. pp. 4728-4755 (1979)
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	Barton et al.. J. Chem. Soc.. Vol. 1. pp. 251-259 (1987)

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PATENT AND TRADEMARK OFFICEAtty. Docket No. **4475.534-U.S.**Serial No. **To be assigned**INFORMATION DISCLOSURE  
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			<u>Arunachalam et al., The Journal of Org. Chem., Vol. 46, pp. 2966-2968 (Feb. 20, 1981)</u>
			<u>Dolle et al., The Journal of Organic Chem., Vol. 51, pp. 4047-4053 (1986)</u>
			<u>Fieser et al., J. AM. Chem. Soc., Vol. 75, pp. 4719-4722 (1953)</u>
			<u>Fieser, J. AM. Chem. Soc., Vol. 75, pp. 4395-4423 (1953)</u>
			<u>Byskov et al., Nature, Vol. 374, pp. 559-562 (Apr. 6, 1995)</u>
			<u>Byskov et al., Dev. Biol., Vol. 52, pp. 193-200 (1976)</u>
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			<u>Ennig et al., Dev. Biol., Vol. 119, pp. 313-321 (1987)</u>
			<u>Downs, Dev. Biol., Vol. 82, pp. 454-458 (Jan. 1985)</u>

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		Christian Grøndahl et al., Human Reproduction, "Human Oocyte
		Maturation in vitro is stimulated by meiosis-activating sterol".,
		Vol. 15, Part 5, pp. 3-10 (2000)
		Christa Hegele-Hartung et al., Biology of Reproduction, "Activation
		of Meiotic Maturation in Rat Oocytes After Treatment with Follicular
		Fluid Meiosis-Activating Sterol in Vitro and Ex Vitro", Vol. 64,
		pp. 418-424 (2001)
		Christa Hegele-Hartung et al., Biology of Reproduction, "Nuclear and
		Cytoplasmic Maturation of Mouse Oocytes After Treatment with Synthetic
		Meiosis-Activating Sterol In Vitro <sup>1</sup> ", Vol. 64, pp.1362-1372(1999)
		Grøndahl et al., Biology of Reproduction, "Meiosis-activating sterol
		Promotes resumption of meiosis in mouse oocytes cultured in vitro in
		Contrast to related oxysterols[In Process Citation) Vol. 58(5) pp.1297-
		Dave et al., Can. J. Chem, vo. 58(23), pages 2666-2678, (1980)
		Suginome et al., J. Chem Soc., Perkin Trans. 1, (12) pages 2920-2925,
		(1979)

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